

the flow of the inert as are not uniform, [the] fluctuation of the diameter of the optical fiber drawn from the preform is liable to occur.

IN THE CLAIMS:

Please amend claims 1 through 12 as follows.

1. (Amended) A furnace for drawing an optical fiber comprising a muffle tube and an inner tube connected to an end of the muffle tube, arranging inside said muffle tube and said inner tube a preform supported by a dummy rod at an upper part thereof, in such a manner that said preform descends with said dummy rod and said preform is melted by a heater arranged outside of said muffle tube, so as to draw an optical fiber from the lower end of said preform, wherein one [set] or [plural sets of] more partitions, each partition comprising one or two separating plates, separate a space inside said inner tube above said preform into plural parts in an advancing direction of said preform arranged inside said space, and descending with said preform during drawing an optical fiber, and a gas blowing inlet for blowing an inert gas into said inner tube and said muffle tube is provided at the wall of said inner tube at a part under said separating plate.

2. (Amended) A furnace for drawing an optical fiber as claimed in claim 1, [characterized in that said plural sets of] comprising two or more partitions, wherein the separating plates being penetrated by said dummy rod descend with said dummy rod, and said respective [sets of said] plural [sets] partitions of separating plates are stopped one by one on said inner wall of said inner tube from an upper part, as that said space inside

said inner tube above said preform is separated into an upper part and a lower part by each said stopped separating plate.

3. (Amended) A furnace for drawing an optical fiber as claimed in claim 2, [characterized in that] wherein the outer diameters of said respective separating plates of the [plural sets] two or more partitions decrease gradually one by one from the upper part to the lower part, [that] said inner tube has a truncated cone shape by decreasing the inner diameter thereof from the upper part to the lower part, [that] said plural [sets] partitions of separating plates descend with said dummy rod, and [that] said plural [sets] partitions of separating plates are stopped in their descent one [set] partition by one [set] partition from the upper part owing to the contact of the outer periphery of said separating plate with the inner wall of said inner tube.

4. (Amended) A furnace for drawing an optical fiber as claimed in claim 2, [characterized in that] wherein at least one [set] of said plural [sets] partitions [of separating plates] is composed of an outer member and an inner member, [that] an outer diameter of said outer member is the same as the inner diameter of said inner tube at a position where said outer member is stopped by said inner tube, [and it is further characterized in that] the center hole diameter of said outermember is larger than the outer diameter of said dummy rod so as to absorb the deviation from a concentric condition of said inner tube and said dummy rod, [and] the outer diameter of said inner member is larger than said center hole diameter of said outer member and is smaller than said outer diameter of said outer member, [and] the center hole diameter of said inner

member is larger than said outer diameter of said dummy rod, and said dummy rod penetrates through said center holes while said outer member is placed at the lower side and said inner member is placed at the upper side, so as to support said inner member by said outer member when said outer member of said separating plate is stopped by said inner wall of said inner tube.

5. (Amended) A furnace for drawing an optical fiber as claimed in claim 1, characterized in that said one [set] partition or plural [sets] partitions [of separating plates], each partition comprising one or two separating plates, are arranged in the vicinity of the lower end of said dummy rod or the upper part of said preform to descend with said preform.

6. (Amended) A furnace for drawing an optical fiber as claimed in claim 5, [characterized in that] wherein at least one of said one [set] partition or plural [sets] partitions [of separating plates are] is composed of an outer member and an inner member, that the outer diameter of said outer member is smaller than the inner diameter of said inner tube, the center hole diameter of said outer member is larger than the outer diameter of said dummy rod so as to absorb the deviation from a concentric condition of said inner tube and said dummy rod, [that] the outer diameter of said inner member is larger than said center hole diameter of said outer member and smaller than said outer diameter of said outer member, [that] the center hole diameter of said inner member is the same as or larger than said outer diameter of said dummy rod, and said dummy rod penetrates through said center [holes] hole while said inner member is [placed at the

lower side and said outer member is placed at the upper side, so as to support said inner member by placing said outer member on said inner member, and by placing said inner member] fixed to said dummy rod or is placed on a supporting member fixed to said dummy rod, and said outer member is placed on [or by fixing] said inner member [to said dummy rod].

7. (Amended) A furnace for drawing an optical fiber as claimed in claim 1, [characterized in that] wherein each separating plate has plural protrusions [are] provided on the outer periphery of the separating plate, so as to prevent parts of said separating plate other than said protrusions from contacting said inner wall surface of said inner tube.

8. (Amended) A furnace for drawing an optical fiber as claimed in claim 1, [characterized in that] wherein each said separating plate comprises a heat insulating material.

9. (Amended) A furnace for drawing an optical fiber as claimed in claim 8, [characterized in that] wherein each said separating plate comprises a heat insulating material formed of carbon felt.

10. (Amended) A furnace for drawing an optical fiber as claimed in claim 1, [characterized in that] further comprising an auxiliary heater [is] arranged [outside a] in

the vicinity of an upper end of said inner tube, so as to heat an upper space inside said inner tube.

11. (Amended) A method for drawing an optical fiber comprising: arranging a preform supported by a dummy rod at an upper part [thereof] of the preform inside a muffle tube and an inner tube connected to an end of the muffle tube in such a manner that said preform descends with said dummy rod, and melting said preform by heating to draw an optical fiber from said preform, [characterized in] such that while one [set] partition or plural [sets] partitions of separating plates are arranged inside said inner tube to vertically separate a space inside said inner tube into plural parts, the vicinity of the lower end of said preform is melted while an inert gas flows into the inside of said inner tube and a muffle tube via a gas blowing inlet provided on a wall of said inner tube under said separating plate, so as to draw an optical fiber from a lower end of said preform.

12. (Amended) A method for drawing an optical fiber as claimed in claim 11, [characterized in that] wherein while a vertical temperature difference in an upper space inside said inner tube is reduced by heating a vicinity of an upper end of said upper space inside said inner tube by an auxiliary heater, said vicinity of said lower end of said preform is heated and melted by a heater arranged outside said muffle tube, so as to draw an optical fiber from said lower end of said preform.